

Serial No.: 10/775,058
Docket No.: 104-R001
Amendment dated June 3, 2008
Reply to the Office Action of February 7, 2008

Amendments to the Claims

The listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Original) A video display apparatus with an on-screen display pivoting function, comprising:
 - an on-screen display (OSD) generating section for receiving horizontal/vertical synchronizing signals and clock signals, and for outputting first video signals in response to OSD control signals;
 - a pivot circuit section for receiving the first video signals, for storing in a position-converting manner a write address of the first video signals in correspondence with a pre-set pivot write address, and for converting the write address in response to the horizontal/vertical synchronizing signals and the clock signals so as to output the first video signals in the form of second video signals;
 - a scale converting section for furnishing the horizontal/vertical synchronizing signals and the clock signals to said OSD generating section and said pivot circuit section, respectively, and for receiving the second video signals so as to convert scales of the second video signals in response to scale control signals; and
 - a control section for furnishing the OSD control signals and the scale control signals to said OSD generating section and said scale converting section, respectively, in response to OSD driving signals, and for furnishing pivot control signals to said pivot control section in response to mode control signals generated by a user.
2. (Original) The video display apparatus as claimed in claim 1, wherein said pivot circuit section comprises:
 - an R-pivot circuit for receiving R-data signals of the first video signals from said OSD generating section, for storing in a position-converting manner a write address of the R-data signals in correspondence with a pre-set pivot write address in response to the pivot control signals, and for converting the write address in response to the horizontal/vertical synchronizing

Serial No.: 10/775,058
Docket No.: 104-R001
Amendment dated June 3, 2008
Reply to the Office Action of February 7, 2008

signals and the clock signals so as to output the stored R-data signals in a form of R-data signals of the second video signals;

a G-pivot circuit for receiving G-data signals of the first video signals from said OSD generating section, for storing in a position-converting manner a write address of the G-data signals in correspondence with the pre-set pivot write address in response to the pivot control signals, and for converting the write address in response to the horizontal/vertical synchronizing signals and the clock signals so as to output the stored G-data signals in a form of G-data signals of the second video signals; and

a B-pivot circuit for receiving B-data signals of the first video signals from said OSD generating section, for storing in a position-converting manner a write address of the B-data signals in correspondence with the pre-set pivot write address in response to the pivot control signals, and for converting the write address in response to the horizontal/vertical synchronizing signals and the clock signals so as to output the stored B-data signals in a form of B-data signals of the second video signals.

3. (Original) The video display apparatus as claimed in claim 2, wherein each of said R, G, and B pivot circuits comprises:

an analog/digital converting section for receiving relevant picture data signals of R, G and B data signals, respectively, of the first video signals from said OSD generating section so as to convert them to digital signals;

a buffering section for receiving and storing the picture data signals from said analog/digital converting section, and for outputting previous picture data signals upon receiving next picture data signals from said analog/digital converting section;

a pivot controller for outputting storing position control signals and data selection control signals in response to the pivot control signals of said control section;

a data storing section for receiving and storing the picture data signals of said buffering section, and for storing in a position-converting manner a write address of the picture data signals of said buffering section in correspondence with the pre-set pivot write address in response to the storing position control signals; and

a data selector for receiving one of the picture data signals of the first video signals and

Serial No.: 10/775,058
Docket No.: 104-R001
Amendment dated June 3, 2008
Reply to the Office Action of February 7, 2008

the picture data signals of said data storing section, and for outputting said one of the picture data signals of the first video signals and the picture data signals of said data storing section in a form of second video signals.

4. (Original) The video display apparatus as claimed in claim 3, wherein said buffering section comprises eight buffers for storing 8-bit picture data signals from said analog/digital converting section.

5. (Original) A video display apparatus with an on-screen display pivoting function, comprising:

- a power supply section for supplying power;

- a display section for receiving the power from said power supply section, and for displaying a picture of externally inputted video signals to a user;

- a signal converter/clock generator section for receiving horizontal/vertical synchronizing signals and video signals, for converting the video signals to first digital signals in response to first control signals, and for generating clock signals;

- a decoder for receiving brightness/chromatic signals, and for converting the brightness/chromatic signals to second digital signals in response to second control signals;

- a frame rate converter section for receiving the horizontal/vertical synchronizing signals and the video signals from said signal converting/clock generator section, for receiving the brightness/chromatic signals from said decoder, for storing the video signals in response to third control signals, and for converting the stored video signals so as to have a certain frequency ratio in correspondence with display characteristics of the display section;

- an on-screen display (OSD) generating section for receiving the horizontal/vertical synchronizing signals and the clock signals, and for outputting first video signals in response to OSD control signals;

- a pivot circuit section for receiving the first video signals, for storing in a position-converting manner a write address of the first video signals in correspondence with a pre-set pivot write address, and for converting the write address in response to the horizontal/vertical synchronizing signals and the clock signals so as to output the first video signals in the form of

Serial No.: 10/775,058
Docket No.: 104-R001
Amendment dated June 3, 2008
Reply to the Office Action of February 7, 2008

second video signals;

a scale converting section for furnishing the horizontal/vertical synchronizing signals and the clock signals to said OSD generating section and said pivot circuit section, respectively, for converting scales of video signals of said frame rate converting section, and for receiving the second video signals so as to convert scales of the second video signals of said pivot circuit section in response to scale control signals;

a control section for furnishing the first, second and third control signals to said signal converting/clock generating section, said decoder and said frame rate converting section, respectively, for furnishing the OSD control signals and the scale control signals to said OSD generating section and said scale converting section, respectively, in response to OSD driving signals, and for furnishing pivot control signals to said pivot circuit section in response to mode control signals; and

a driving section for furnishing video signals and driving signals from said scale converting section to said display section.

6. (Original) The video display apparatus as claimed in claim 5, wherein said pivot circuit section comprises:

an R-pivot circuit for receiving R-data signals of the first video signals from said OSD generating section, for storing in a position-converting manner a write address of the R-data signals in correspondence with a pre-set pivot write address in response to the pivot control signals, and for converting the write address in response to the horizontal/vertical synchronizing signals and the clock signals so as to output the stored R-data signals in a form of R-data signals of the second video signals;

a G-pivot circuit for receiving G-data signals of the first video signals from said OSD generating section, for storing in a position-converting manner a write address of the G-data signals in correspondence with the pre-set pivot write address in response to the pivot control signals, and for converting the write address in response to the horizontal/vertical synchronizing signals and the clock signals so as to output the stored G-data signals in a form of G-data signals of the second video signals; and

a B-pivot circuit for receiving B-data signals of the first video signals from said OSD

Serial No.: 10/775,058
Docket No.: 104-R001
Amendment dated June 3, 2008
Reply to the Office Action of February 7, 2008

generating section, for storing in a position-converting manner a write address of the B-data signals in correspondence with the pre-set pivot write address in response to the pivot control signals, and for converting the write address in response to the horizontal/vertical synchronizing signals and the clock signals so as to output the stored B-data signals in a form of B-data signals of the second video signals.

7. (Original) The video display apparatus as claimed in claim 6, wherein each of said R, G and B pivot circuits comprises:

an analog/digital converting section for receiving relevant picture data signals of the R, G and B data signals, respectively, of the first video signals from said OSD generating section so as to convert them to digital signals;

a buffering section for receiving and storing the picture data signals from said analog/digital converting section, and for outputting previous picture data signals upon receiving next picture data signals from said analog/digital converting section;

a pivot controller for outputting storing position control signals and data selection control signals in response to the pivot control signals of said control section;

a data storing section for receiving and storing the picture data signals of said buffering section, and for storing in a position-converting manner a write address of the picture data signals of said buffering section in correspondence with a pre-set pivot write address in response to store position control signals; and

a data selector for receiving one of the picture data signals of the first video signals and the picture data signals of said data storing section, and for outputting said one of the picture data signals of the first video signals and the picture data signals of said data storing section in a form of second video signals.

8. (Original) The video display apparatus as claimed in claim 7, wherein said buffering section comprises eight buffers for storing 8-bit picture data signals from said analog/digital converting section.

9. (Original) The video display apparatus as claimed in claim 5, wherein said

Serial No.: 10/775,058
Docket No.: 104-R001
Amendment dated June 3, 2008
Reply to the Office Action of February 7, 2008

frame rate converter section comprises:

a frame memory for storing the digital video signals from said signal converter/clock generator section in response to control inputs; and

a frame rate converter for writing the output video signals of said signal converter/clock generator section into said frame memory, and for reading out the video signals written into said frame memory so as to convert the video signals to have a certain frequency ratio in correspondence with display characteristics of said display section.

10. (Original) The video display apparatus as claimed in claim 9, wherein said frame rate converter generates said control inputs and provides said control input to said frame memory.

11. (Original) The video display apparatus as claimed in claim 5, wherein said OSD driving signals are generated by the user.

12. (Original) The video display apparatus as claimed in claim 5, wherein said mode control signals are generated by the user.

13. (Original) A video display apparatus having an on-screen display pivoting function, comprising:

on-screen display (OSD) generating means for outputting first video signals having a write address in response to OSD signals;

pivot circuit means for receiving the first video signals, for converting the write address of the first video signals, and for outputting the first video signal in the form of second video signals having scales;

scale converting means for receiving the second video signals, and for converting the scales of the second video signals in response to scale control signals; and

control means for furnishing the OSD control signals and the scale control signals to said OSD generating means and said scale converting means, respectively, in response to OSD driving signals generated by a user input.

Serial No.: 10/775,058
Docket No.: 104-R001
Amendment dated June 3, 2008
Reply to the Office Action of February 7, 2008

14. (Original) The video display apparatus as claimed in claim 13, wherein said pivot circuit means comprises:

an R-pivot circuit for receiving R-data signals of the first video signals from said OSD generating means, for storing a write address of the R-data signals in response to pivot control signals generated by said control means, and for converting the write address so as to output the R-data signals in a form of R-data signals of the second video signals;

a G-pivot circuit for receiving G-data signals of the first video signals from said OSD generating means and for converting the write address so as to output the stored G-data signals in a form of G-data signals of the second video signals; and

a B-pivot circuit for receiving B-data signals of the first video signals from said OSD generating means and for converting the write address so as to output the stored B-data signals in a form of B-data signals of the second video signals.

15. (Original) The video display apparatus as claimed in claim 14, wherein each of said R, G and B pivot circuits comprises:

an analog/digital converting section for receiving relevant picture data signals of R, G and B data signals, respectively, of the first video signals from said OSD generating means so as to convert them to digital signals;

a buffering section for receiving and storing the picture data signals from said analog/digital converting section, and for outputting previous picture data signals upon receiving next picture data signals from said analog/digital converting section;

a pivot controller for outputting storing position control signals and data selection control signals in response to pivot control signals from said control means;

a data storing section for receiving and storing the picture data signals of said buffering section, and for storing a write address of the picture data signals of said buffering section in response to the storing position control signals; and

a data selector for receiving one of the picture data signals of the first video signals and the picture data signals of said data storing section, and for outputting said one of the picture data signals of the first video signals and the picture data signals of said data storing section in

a form of second video signals.

16. (Original) The video display apparatus as claimed in claim 15, wherein said buffering section comprises eight buffers for storing 8-bit picture data signals from said analog/digital converting section.

17. (Original) The video display apparatus as claimed in claim 13, further comprising:

signal converting/clock generating means for receiving horizontal/vertical synchronizing signals and video signals, for converting the video signals to first digital signals in response to first control signals from said control means, and for generating clock signals.

18. (Original) The video display apparatus as claimed in claim 17, further comprising:

decoder means for receiving brightness/chromatic signals, and for converting the brightness/chromatic signal to second digital signals in response to second control signals from said control means.

19. (Original) The video display apparatus as claimed in claim 18, further comprising:

frame rate converting means for receiving the horizontal/vertical synchronizing signals and the first video signals from said signal converting/clock generating means, for receiving the brightness/chromatic signals from said decoder means, for storing the first video signals in response to third control signals from said control means, and for converting the stored first video signals so as to have a certain frequency ratio in correspondence with display characteristics of a display section.

20. (Previously Presented) A method of displaying an on-screen display (OSD) image in a video display apparatus having a screen and a rotatable screen body supporting the screen, the method comprising:

Serial No.: 10/775,058
Docket No.: 104-R001
Amendment dated June 3, 2008
Reply to the Office Action of February 7, 2008

generating a mode signal indicating a rotated state of the screen body according to manipulation of a key to indicate the rotated state of the screen body; and
displaying a picture of externally inputted color component video signals on the screen body and displaying the OSD image on the displayed picture at a rotated position in accordance with the mode signal.

21. (Cancelled)

22. (Previously Presented) The method as claimed in claim 20, wherein the user input is made by a direct key selection.

23. (Previously Presented) The method as claimed in claim 20, further comprising:
rotating the OSD image in accordance with the mode signal.

24. (Cancelled)

25. (Cancelled)

26. (Previously Presented) The method as claimed in claim 23, wherein the OSD image rotating operation comprises reordering read sequence of the OSD data which is stored in a data memory.

27. (Previously Presented) The method as claimed in claim 26, wherein the reordering operation is made to form characters and/or symbols represented by the OSD data in a perpendicularly rotated manner.

28. (Previously Presented) The method as claimed in claim 23, wherein the OSD image rotating operation comprises reordering read addresses of the OSD data which is stored in a data memory.

Serial No.: 10/775,058
Docket No.: 104-R001
Amendment dated June 3, 2008
Reply to the Office Action of February 7, 2008

29. (Previously Presented) The method as claimed in claim 28, wherein the reordering operation is made to form characters and/or symbols represented by the OSD data in a perpendicularly rotated manner.

30. (Previously Presented) The method as claimed in claim 20, wherein the displaying operation comprises:
reading OSD data contained in the OSD image as first OSD data; and
modifying the first OSD data as second OSD data according to the generated mode signal.

31. (Previously Presented) The method as claimed in claim 30, wherein the modifying operation comprises:
storing a write address of the first OSD data in a predetermined format that corresponds to the rotated position of the screen body.

32. (Previously Presented) The method as claimed in claim 20, wherein the generating operation comprises:
activating a key located on the rotatable screen body.

33. (Canceled)

34. (Previously Presented) A method of displaying a first image including an on-screen display (OSD) in a video display apparatus having a screen and a rotatable screen body, the method comprising:
receiving an externally input video signal having a second image;
displaying the second image;
modifying OSD data corresponding to the first image including the OSD with respect to a position of the rotatable screen when the screen is rotated, according to a key manipulation to indicate the position of the rotatable screen; and

Serial No.: 10/775,058
Docket No.: 104-R001
Amendment dated June 3, 2008
Reply to the Office Action of February 7, 2008

displaying the first image that corresponds to the modified OSD data on the second image displayed on the rotatable screen.

35. (Currently Amended) A video display apparatus having a screen body to display an on- screen display (OSD) image, the video display apparatus comprising:
a converter to receive externally inputted video signals having a picture;
a controller to generate a mode signal indicating a rotated state of the screen body according to a key manipulation by a user to indicate a rotated position of the screen body; and
a circuit unit to display the picture of the externally inputted video signals on the screen body and to display the OSD image at a rotated position in accordance with the mode signal on the displayed picture.

36. (Canceled)

37. (Canceled)

38. (Canceled)

39. (Canceled)

40. (Previously Presented) A method of displaying a first image including an on-screen display (OSD) color component video signal in a video display apparatus having a rotatable screen, the method comprising:
receiving an external color component video signal having a second image;
displaying the second image to the video display apparatus;
modifying OSD data corresponding to the first image including the OSD color component video signal with respect to an angle of rotation of the screen when the screen is rotated, according to manipulation of a key to indicate the angle of rotation; and
displaying the first image corresponding to the modified OSD data on the second image displayed on the rotated screen.

Serial No.: 10/775,058
Docket No.: 104-R001
Amendment dated June 3, 2008
Reply to the Office Action of February 7, 2008

41. (Previously Presented) The method as claimed in claim 40, wherein the angle of rotation of the screen is obtained by rotating the screen in the clockwise or counterclockwise directions.

42. (Canceled)

43. (Canceled)

44. (Canceled)

45. (Canceled)

46. (Canceled)

47. (Currently Amended) A method of displaying an on-screen display (OSD) in a video display apparatus having a rotatable screen body associated with one or more screen function keys that are selectable to ~~change an operational state~~ indicate a position of the screen body, the method comprising:

receiving a selection of a screen function key corresponding to the ~~operational state~~ position of the screen body before displaying the OSD on the screen body;

generating a mode signal indicating a rotated state of the screen body in response to a rotation of the screen body; and

selectively displaying the OSD on the screen body in response to the selection of the screen function key such that the OSD is displayed at a rotated position when the mode signal is generated.

48. (Canceled)

Serial No.: 10/775,058
Docket No.: 104-R001
Amendment dated June 3, 2008
Reply to the Office Action of February 7, 2008

49. (Currently Amended) A video display apparatus, comprising:
a rotatable screen having one or more screen function keys that are selectable to ~~change an operational state~~ indicate a position of the screen when the screen is powered on;
and
an on-screen display unit to control the screen to display an on-screen display (OSD) in response to a selection of a screen function key on the screen ~~corresponding to the operation state of the screen~~ to display an OSD, to receive a mode control signal indicating a rotated state of the screen when the screen is rotated, and to modify OSD data corresponding to the OSD with respect to the rotatable screen according to the mode control signal such that the screen displays the modified OSD data,
wherein the rotatable screen does not display the OSD when operating during a first time, and the rotatable screen displays the OSD when operating during a second time following the first time, the second time beginning when the selection of the screen function key is received.

50. (Canceled)

51. (Canceled)

52. (Currently Amended) A video display apparatus having a rotatable display unit, the video display apparatus comprising:

an external signal unit to receive an external image signal;
an OSD generator to generate an internal OSD image signal in response to an OSD driving signal;
a control unit to generate at least one of a mode signal indicating a rotated state of the display unit and a OSD driving signal according to a key manipulation by a user to indicate the rotated state of the display unit and request and OSD, respectively; and
a circuit unit to drive the display unit to display the external image signal and to drive the display unit to display the internal OSD image signal at a rotated position in accordance with the mode signal generated by the control unit.

Serial No.: 10/775,058
Docket No.: 104-R001
Amendment dated June 3, 2008
Reply to the Office Action of February 7, 2008

53. (Previously Presented) The video apparatus as claimed in claim 52, wherein the display unit comprises one or more function keys to change operation settings thereof by indicating the rotated state of the display unit such that the circuit unit drives the display unit to display the internal OSD image signal in response to a selection of the one or more function keys.

54. (Previously Presented) The video apparatus as claimed in claim 53, wherein the display unit comprises:
a screen; and
a rotatable screen body surrounding the screen having the one or more function keys installed thereon.

55. (Currently Amended) A method of controlling a video display apparatus having a rotatable display unit, the method comprising:
receiving an external image signal;
generating an internal OSD image signal in response to an OSD driving signal;
generating at least one of a mode signal indicating to indicate a rotated state of the display unit and the OSD driving signal according to manipulation of a function key by a user to indicate the rotated state of the display unit and request an OSD, respectively; and
driving the display unit to display the received external image signal and driving the display unit to display the generated internal OSD image signal at a rotated position in accordance with the generated mode signal and the OSD driving signal.

56. (Currently Amended) The method as claimed in claim 55, further comprising:
enabling selection of one or more function keys of the display unit to change operation settings thereof by indicating the rotated state of the display unit such that the display unit is driven to display the generated internal OSD image signal in response to a selection of the one or more function keys to request the OSD.

Serial No.: 10/775,058
Docket No.: 104-R001
Amendment dated June 3, 2008
Reply to the Office Action of February 7, 2008

57. (Previously Presented) A video display apparatus having a rotatable display unit to display an image of an external color component video signal, the video display apparatus comprising:

an OSD generator to generate an OSD color component video signal;

a control unit to generate a mode signal indicating a rotated state of the display unit according to manipulation of a function key to indicate the rotated state of the screen body; and

a circuit unit to drive the display unit to display the OSD color component video signal on the image of the external color component video signal at a rotated position in accordance with the mode signal generated by the control unit.

58. (Previously Presented) The video display apparatus as claimed in claim 57, further comprising:

an external signal unit to receive the external color component video signal such that the circuit unit further drives the display unit to display the external color component video signal with the OSD color component video signal.

59. (Previously Presented) A method of controlling a video display apparatus having a rotatable display unit to display an image of an external color component video signal, the method comprising:

generating an OSD color component video signal;

generating a mode signal indicating a rotated state of the display unit according to a key manipulation to indicate the rotated state of the screen body; and

driving the display unit to display the generated OSD color component video signal on the image of the external color component video signal at a rotated position in accordance with the generated mode signal.

60. (Previously Presented) The method as claimed in claim 59, further comprising:

receiving the external color component video signal such that the driving of the display unit to display the generated OSD color component video signal at the rotated position in

Serial No.: 10/775,058
Docket No.: 104-R001
Amendment dated June 3, 2008
Reply to the Office Action of February 7, 2008

accordance with the generated mode signal further comprises driving the display unit to display the received external color component video signal with the generated OSD color component video signal.

61. (Previously Presented) The method of claim 34, wherein the displaying of the first image that corresponds to the modified OSD data on the second image displayed on the rotatable screen comprises displaying the first image in a center of the rotatable screen.

62. (Canceled)

63. (Previously Presented) The method of claim 40, wherein the displaying of the first image corresponding to the modified OSD data on the second image displayed on the rotated screen comprises displaying the first image in a center of the rotated screen.

64. (Previously Presented) The method of claim 34, wherein the first image comprises a control window.

65. (Canceled)

66. (Previously Presented) The method of claim 40, wherein the first image comprises a control window.

67. (Previously Presented) The method of claim 34, wherein the first image including the OSD indicates screen viewing settings comprising at least one of a brightness of a screen picture affecting the displayed second image and a size of the screen picture affecting the displayed second image.

68. (Canceled)

69. (Previously Presented) The method of claim 40, wherein the first image

Serial No.: 10/775,058
Docket No.: 104-R001
Amendment dated June 3, 2008
Reply to the Office Action of February 7, 2008

including the OSD indicates screen viewing settings comprising at least one of a brightness of a screen picture affecting the displayed second image and a size of the screen picture affecting the displayed second image.

70 (Previously Presented) The video display apparatus as claimed in claim 57, wherein the rotatable display unit displays the OSD image on the screen according to manipulations of another key.

71. (Previously Presented) A method of displaying an on-screen display (OSD) in a video display apparatus having a screen and a rotatable screen body supporting the screen, the method comprising:

generating a mode signal indicating a rotated state of the screen body in response to a key manipulation to indicate the rotated state of the screen body; and

displaying a picture of externally input color component video signals on the screen body and displaying an OSD image simultaneously on the displayed picture,

wherein the OSD image is rotated with respect to the screen body in response to the mode signal.

72. (Previously Presented) A video display apparatus having a screen and a rotatable screen body supporting the screen, the apparatus comprising:

a key unit to generate a mode signal indicating a rotated state of the screen body; and

a display unit to display a picture of externally input color component video signals on the screen body and to display an OSD image simultaneously on the displayed picture,

wherein the OSD image is rotated with respect to the screen body in response to the mode signal.

73. (New) A video display apparatus having a rotatable display unit and an on-screen display function, comprising:

a controller to receive a mode control signal to indicate a rotated state of the display unit and a OSD control signal to request generation of an OSD, and to generate at least one of a

pivot signal and a OSD driving signal;

an OSD generator to generate an internal OSD image signal; and

a pivot circuit to receive the internal OSD image signal and output a pivoted OSD image signal,

wherein the controller furnishes the OSD driving signal to control the OSD generated to generate the internal OSD image in response to the OSD control signal generated by a user, and the controller furnishes the pivot signal to control the pivot circuit to generate the pivoted OSD image signal in response to the mode control signal generated by the user.

74. (New) The video display apparatus of claim 73, further comprising:

a first converter to receive a picture of externally inputted video signals and to convert the video signals so as to have a certain frequency ratio in correspondence with display characteristics of the display unit; and

a second converter to receive the pivoted OSD signal and converted video signals so as to supply the pivoted OSD signal and the converted video signals to the display unit.

75. (New) The video display apparatus of claim 73, wherein the pivot circuit comprises:

an R-pivot circuit to receive R-data signals of the internal OSD image signal from the OSD generator, to store in a position-converting manner a write address of the R-data signals in correspondence with a pre-set pivot write address in response to the pivot signal, and to convert the stored R-data signals into pivoted R-data signals of the pivoted OSD signal;

a G-pivot circuit to receive G-data signals of the internal OSD image signal from the OSD generator, to store in a position-converting manner a write address of the G-data signals in correspondence with the pre-set pivot write address in response to the pivot signal, and to convert the stored G-data signals into pivoted G-data signals of the pivoted OSD signal; and

a B-pivot circuit to receive B-data signals of the internal OSD image signal from the OSD generator, to store in a position-converting manner a write address of the B-data signals in correspondence with the pre-set pivot write address in response to the pivot signal, and to convert the stored B-data signals into pivoted B-data signals of the pivoted OSD signal.

Serial No.: 10/775,058
Docket No.: 104-R001
Amendment dated June 3, 2008
Reply to the Office Action of February 7, 2008

76. (New) A video display apparatus having an on-screen display pivoting function, comprising:

a rotatable display;

a controller to receive at least one of a mode control signal and an on-screen display (OSD) control signal, and to generate at least one of a pivot control signal and a OSD driving signal, respectively;

a frame converter to receive video signals and to convert the video signals so as to have a certain frequency ratio in correspondence with display characteristics of the display;

an on-screen display (OSD) generator to receive the converted video signals and to output first video signals in response to the OSD control signal;

a pivot circuit section to receive the first video signals, to store in a position-converting manner a write address of the first video signals in correspondence with a pre-set pivot write address, and to convert the write address so as to output the first video signals in the form of pivoted second video signals in response to the pivot control signal; and

a scale converting section to convert scales of video signals of the frame rate converter, and to receive the pivoted second video signals to convert scales of the second video signals of the pivot circuit in response to scale control signals;

77. (New) A video display apparatus having a screen body to display an on- screen display (OSD) image, the video display apparatus comprising:

a converter to receive externally inputted video signals having a picture and convert the video signals so as to have a certain frequency ratio in correspondence with display characteristics of the screen body;

a controller to receive a mode signal to indicate a rotated state of the screen body and to receive a OSD control signal to request generation of an OSD according to a key manipulation by the user; and

a circuit unit to display the picture of the externally inputted video signals on the screen body and to display the OSD image at a rotated position in accordance with the mode signal

Serial No.: 10/775,058
Docket No.: 104-R001
Amendment dated June 3, 2008
Reply to the Office Action of February 7, 2008

and the OSD control signal on the displayed picture.

78. (New) A method of displaying an on-screen display (OSD) image on a video display apparatus having a rotatable display, the method comprising:

- receiving at least one of a mode control signal to indicate a rotated state of the display and a OSD control signal generated by the user to request generation of an OSD image;
- generating an OSD image in response to the OSD control signal;
- pivoting the generated OSD signal in accordance to the rotated state of the display in response to the mode control signal; and
- displaying the pivoted OSD image with a picture of externally inputted video signals on the rotated display according to the mode control signal and the OSD control signal.

79. (New) The video display apparatus of claim 73, further comprising:

- a key unit to generate the mode control signal to indicate a rotated state of the screen body by the user.

80. (New) The video display apparatus of claim 77,

- wherein the mode control signal is generated according to another key manipulation by the user.